AGENCY USE ONLY				
PERMIT NO.:	Date Rec'd.:	Amount Rec'	Check No.:	Rec'd By:
MTG010185	10/24/13	600.00	4301	DD

Montana Department of
ENVIRONMENTAL QUALITY

WATER PROTECTION BUREAU

FORM
NOI

Notice of Intent (NOI) for Montana Pollution Discharge Elimination System Application for New and Existing Concentrated Animal Feeding Operations

The Application form is to be completed by the owner or operator of a Concentrated Animal Feeding Operation (CAFO) or Aquatic Animal Production Facility. Please read the attached instructions before completing this form. You must print or type legibly; forms that are not legible or are not complete will be returned. You must maintain a copy of the completed application form for your records.

Section A - Application Status *(Check one):*

- ☐ New — No prior application submitted for this site.
- ☐ Resubmitted — Permit Number: MTG _____
- ☑ Renewal — Permit Number: MTG 0 1 0 0 0 0
- ☐ Modification — Permit Number: MTG _____

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PERMITTING & COMPLIANCE DIV.

Section B - Facility or Site Information *(See instruction sheet.):*

Site Name GLASGOW STOCKYARDS, INC.

Site Location SW 1/4 SEC. 18 T. 28N R. 40E

Nearest City or Town GLASGOW, MT County VALLEY 10/24/13

Latitude 48.10'37".38 Longitude -106.36'44".75

Date Facility began operation? 1946

Is this facility or site located on Indian Lands? ☐ Yes ☑ No

Section C - Applicant (Owner/Operator) Information:

Owner or Operator Name Mark B Nielsen and Linda M. Nielsen

Mailing Address P. O. Box 129

City, State, and Zip Code Glasgow, MT 59230

Phone Number 406-228-9306

Is the person listed above the owner? ☑ Yes ☐ No

Status of Applicant *(Check one)* ☐ Federal ☐ State ☑ Private ☐ Public ☐ Other (specify) _____

203 WPTS

Section D - Existing or Pendin[illegible]ermits, Certifications, or Approvals: [illegible]one

☑ MPDES CAFO MTG0161[illegible]5 ☐ RCRA _____

☐ PSD (Air Emissions) _____ ☐ Other _____

☐ 404 Permit (dredge & fill) _____ ☐ Other _____

Section E – Standard Industrial Classification (SIC) Codes:

Provide at least one SIC code which best reflects the activity of project described in Section H.			
Code	**A. Primary**	**Code**	**B. Second**
1	212	2	
Code	**C. Third**	**Code**	**D. Fourth**
3		3	

Section F - Facility or Site Contact Person/Position:

Name and Title, or Position Title Linda M Nielsen, Owner/Operator

Mailing Address 55808 US Highway 2

City, State, and Zip Code Nashua, MT 59248

Phone Number 406-785-2401

Section G – Receiving Surface Waters(s):

Outfall/Discharge Locations: For each outfall, List latitude and longitude to the nearest second and the name of the receiving waters			
Outfall Number	**Latitude**	**Longitude**	**Receiving Surface Waters**
001	48.10'36".05	-106.36'55".26	Milk River
002			
003			
004			
005			

Map: Attach a topographic map extending one mile beyond the property boundaries or the site activity identified in Section B depicting the facility or activity boundaries, major drainage patterns, and the receiving surface waters, stated above. Also identify the specific location of the production area, and land application area(s).

Is the receiving water on the 303(d) list for nutrients (nitrogen and/or phosphorus) ☐ Yes ☑ No

Section H – Concentration Animal Feeding Operation Characteristics

Waste Production, Storage and Disposal

Animal type	Number in Open Confinement	Number Housed Under Roof
☐ Mature Dairy Cows		
☐ Dairy Heifers		
☐ Veal Calves		
☐ Cattle (not dairy or veal)	892	
☐ Swine (55 lbs or over)	2	
☐ Swine (55 lbs or under)		
☐ Horses	6	
☐ Sheep or Lambs	64	
☐ Turkeys		
☐ Chickens (broilers)		
☐ Chickens (layers)		
☐ Ducks		
☐ Other (Specify:_____)		
☐ Other (Specify:_____)		
☐ Other (Specify:_____)		

Manure, Litter and/or Wastewater Production and Use.

How much manure, litter, and process wastewater is generated annually by the facility?

Solid (tons):3833 Liquid/Slurry (gallons):16,398

If land applied, how many acres of land under control of the permit applicant are available to apply the manure, litter, or process wastewater generated from the facility? (Note: Do not include setback distances in available acreage

12.4 Acres

How much manure, litter, and process wastewater is transferred to other persons per year? (estimated) Solid (tons):0 Liquid/Slurry (gallons):0

Were the containment structures built after February 2006?

- ☐ Do the waste containment structures have 10 feet of separation between the pond bottom and any bedrock formations?
- ☐ Do the waste containment structures have 4 feet of separation from the pond bottom and any ground water?
- ☐ Were any of the waste containment structures built within 500 feet of any existing well?

Type of Containmen orage	Total Capacity	Units (gall or tons)	Days of Storage
☐ Anaerobic Lagoon			
☑ Storage Pond #1	630,182	GALLONS	VARIES
☐ Storage Pond #2			
☐ Storage Pond #3			
☐ Storage Pond #4			
☐ Storage Pond #5			
☐ Above Ground Storage Tank			
☐ Below Ground Storage Tank #1			
☐ Below Ground Storage Tank #2			
☐ Underfloor Pits			
☐ Roofed Storage Shed			
☐ Concrete Pad			
☐ Impervious Soil Pad			
☐ Other (Specify:_____)			
☐ Other (Specify:_____)			

Physical Data for CAFO

Nutrient Management Plan

All Concentrated Animal Feeding Operations seeking permit coverage after July 31, 2007 are required to complete and implement a Nutrient Management (NMP). The NMP must be submitted to the Department using the form provided by the Department (Form NMP). Check the box below that applies and provide the required information. The NMP must be developed in accordance with ARM 17.30.1334 and implemented upon the effective date of permit coverage. (Check One)

☑ Does the facility have an NMP?

Date NMP was developed: January 2009

Date NMP was last modified: March 2012

☐ NMP has not been prepared; provide detailed explanation below

Section I – Supplemental Information

Section J - CERTIFICATION

Permittee Information:

This Form NMP must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

All Permittees Must Complete the Following Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA]

A. Name (Type or Print)	
Linda M. Nielsen	
B. Title (Type or Print)	**C. Phone No.**
Owner/Operator	406-785-2401
D. Signature Linda M Nielsen	**E. Date Signed** 10-21-2013

The Department will not process this form until all of the requested information is supplied, and the appropriate fees are paid. Return this form (NOI) and the applicable fee to:

Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, MT 59620-0901
(406) 444-3080

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PERMITTING & COMPLIANCE DIV

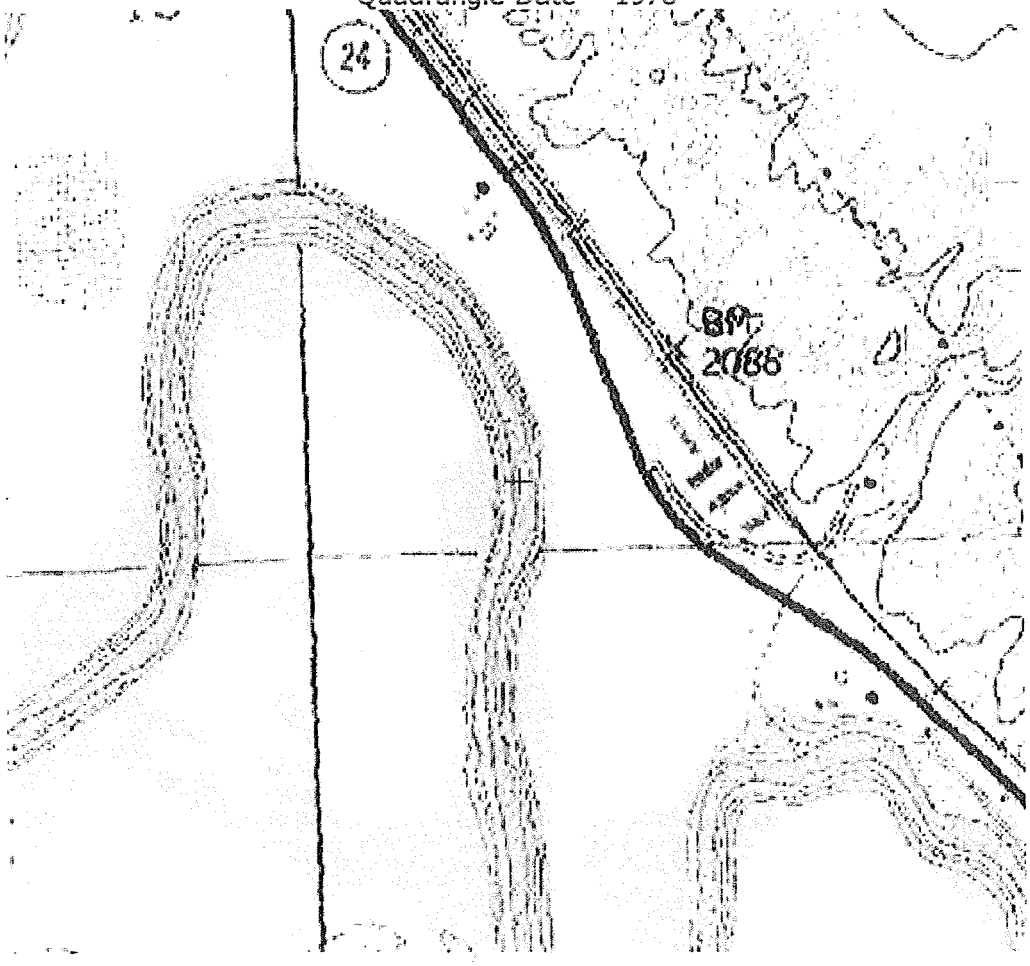
Mc tana Topographic Map Fi der

The map is 0.93 miles wide.

Choose Image Type

Topographic Map Refresh

Quadrangle Date = 1978



Select a Map Control, then click on the map

Map Controls

ZoomIn Zoom Factor 3

ZoomOut

New Center State View

Map Center Coordinates at Red +

Datum: NAD83 NAD27

Decimal Degrees
Lat 48.17668 Long -106.61535

State Plane
E 814398 N 440282

UTM Zone 13
E 379916 N 5337200

US National Grid
13U CP 79916 37200

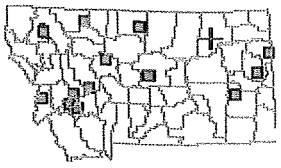
TRS T28N R40E S18

Hydrologic Unit 10050012
Lower Milk River

Download 24K quadrangle: Whately

Download 100K quadrangle: Glasgow

Click the small map to move the main map center.



Green squares show areas where 2004 hi-resolution color photos are available.

Legend | Help

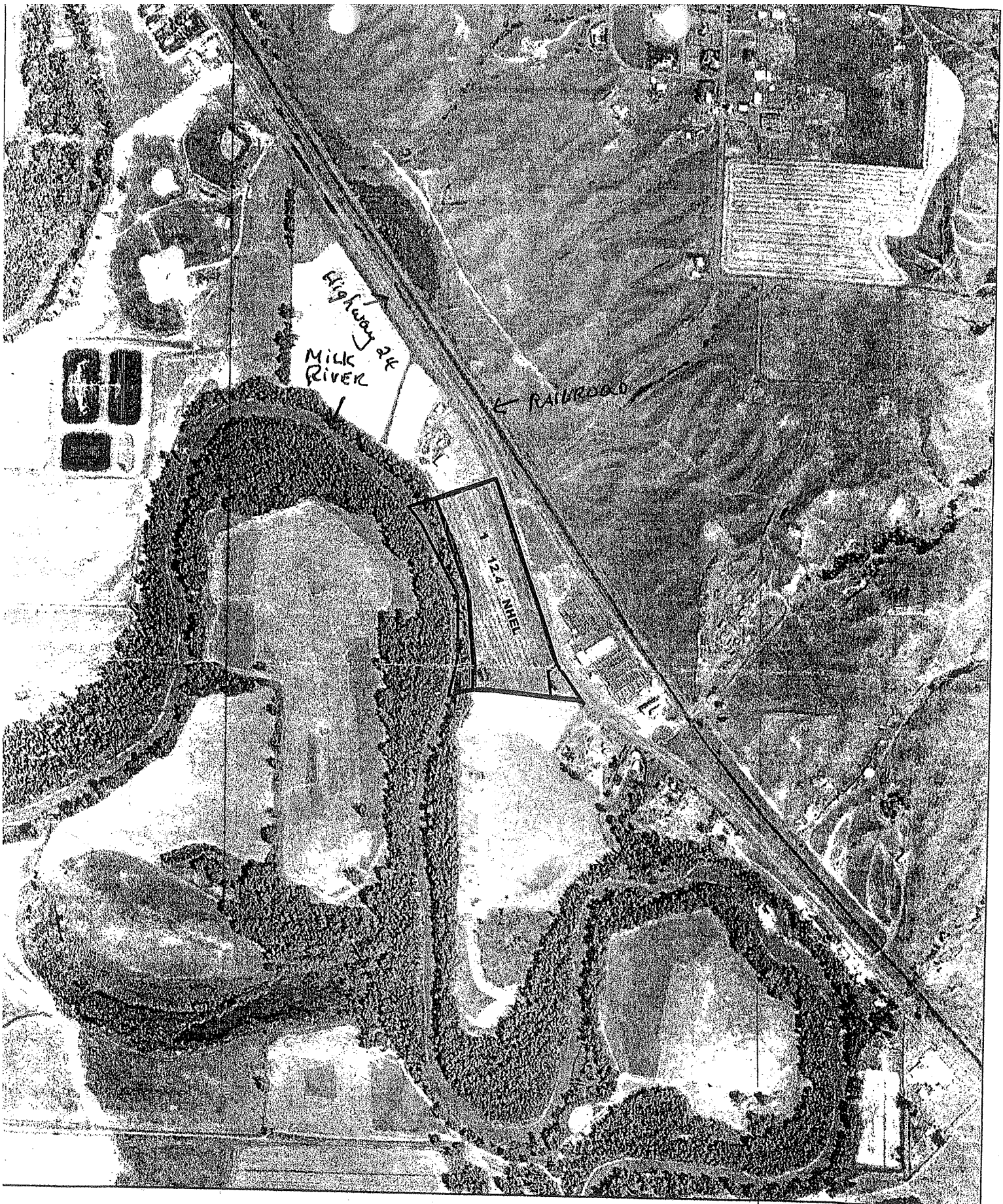
Search Tools

Map Size: Extra Large Large Small Refresh

Click Here to view other map data for this area.

Montana Natural Resource Information System

Technical questions about the application can be directed to:nris@mt.gov
Please let us know if you have problems with the Topofinder!!



Farm 2594
Tract 5146
18-28-40

Valley County FSA

Map Printed:Mar 1, 2006

Field Boundary

N

AGENCY USE ONLY				
PERMIT NO.:	Date Rec'd.:	Amount Rec'd.:	Check No.:	Rec'd By:
MTG010185	10/24/13	$600	V #4301	DD

Montana Department of
ENVIRONMENTAL QUALITY

WATER PROTECTION BUREAU

FORM
NMP

Nutrient Management Plan

READ THIS BEFORE COMPLETING FORM: Before completing this form (Form NMP), Concentrated Animal Feeding Operation (CAFO) operators need to read the General Permit, particularly Part IV.A. CAFO operators also need to read the "Instructions For filling out Form NMP," found at the back of this form. Form NMP is intended to help CAFO operators develop a site-specific Nutrient Management Plan, in compliance with Part IV.A of the General Permit and all applicable State rules and statutes. Your Nutrient Management Plan must be maintained at the site as required in Part III of the General Permit. Sections B and C on your Form NMP must state the information exactly the same way as it was stated on the most recently submitted version of your NOI-CAFO. Attach additional pages as necessary, indicating the corresponding section number on this NMP form. The 2013 General Permit, current fee schedule, and related forms are available from the Water Protection Bureau at (406) 444-3080 or http://www.deq.mt.gov/wqinfo/MPDES/CAFO.asp

Section A – NMP Status:

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- ☐ New — No prior NMP submitted for this site.
- ☐ Resubmitted — Previous NMP found incomplete.
- ☐ Modification — Change or update to existing NMP.
- ☑ New 2013 — New 2013 version of NMP.

Section B – Facility Information:

Facility Name GLASGOW STOCKYARDS, INC.

Facility Location SW1/4 SEC. 18 T. T. 28N R. 40E

Nearest City of Town GLASOW, MT 59230 County VALLEY

Section C – Applicant (Owner/Operator Information):

Owner or Operator Name Mark B Nielsen and Linda M. Nielsen

Mailing Address P. O Box 129

City, State, and Zip code Glasgow, MT 59230

Facility Phone Number 406-228-9306

Email gsi@nemont.net

Section D – NMP Minimum Elements:

1. Livestock Statistics		
Animal Type and number of animals	**# of Days on Site (per year)**	**Annual Manure Production (tons, cu. yds. or gal**
1. CATTLE 892	45 SALES X 3 DAYS = 135 DAYS	3763 TN
2. SHEEP 64	135	42 TN
3. HOGS 2	135	.3 TN
4. HORSES 6	135	25 TN
5.		
6.		
7.		
8.		

Method used for estimating annual manure production:
9 YEAR AVERAGE
NRCS CNMP WORKSHEET 10-A-1, MT-CPA-227

2. Manure Handling

a. Describe Manure handling at the facility:
A SKIDSTEER LOADS SCRAPED MANURE ONTO A 2 TON TRUCK. THE RUN-OFF IS CAPTURED BY A STORAGE STRUCTURE AND IS EVAPORATED UNDER NORMAL CONDITIONS. THE LIQUID COULD BE PUMPED TO PASURE, FARM #2594, TRAC T 5146, 18-28-40, AS NEEDED.

b. Frequency of Manure Removal from confinement areas:
MANURE IS SCRAPED WEEKLY AND HAULED DIRECTLY TO LANDFILL.

c. Is this manure temporarily stored in any location other than the confinement area? ☐ **Yes** ☑ **No**
If so then how and where?

d. Is manure stored on impervious surface? ☐ **Yes** ☑ **No**
If yes, describe type and characteristics of this surface:

3. Waste Control Structures					
Waste Control Structures (name/type)	**Length (ft.)**	**Width (ft.)**	**Depth (ft.)**	**Volume (cubic ft. or gallons)**	**Number of days of storage**
1. POND	325	75	3	630,182 gal	approx 120
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

What is the 24 hr. 25 yr. storm event at this facility 3.4 inches

Production area: 3.65 **acres.** **Type of lot (dirt or paved):** dirt and paved

Area contributing drainage form outside CAFO that enters confinement areas and waste storage, conveyance, or treatment structures: 0 **acres.**

What is the annual precipitation during the critical storage period 11 INCH/YEAR

How much freeboard do the pond(s) have 1 FT

4. Disposal of Dead Animals.

Describe how dead animals are disposed of at this facility:
CARCASSES ARE REMOVED WITHIN 24 HOURS OR LESS AND HAULED TO THE VALLEY COUNTY LANDFILL

5. Clean Water Diversion Practices

Describe how clean water is diverted from production area:
GUTTERS AND DOWNSPOUTS ON ROOF TO DIVERT WATER. THERE IS A CONCRETE BERM ON PRODUCTON AREA TO PREVENT CLEAN WATER RUN-OFF TO PRODUCTION AREA. CLEAN WATER FROM THE PARKING LOT IS DIVERTED FROM PRODUCTION AREA AND THE EVAPORATION POND AND IS CHANNELED OFF SITE.

6. Prohibiting Animals and Wastes from Contact with State Waters

Describe how animals and wastes are prohibited from direct contact with state waters:
HIGHWAY 24 PROVIDES A BARRIER TO THE MILK RIVER AND A FENCE CONTAINS THE LIVESTOCK WITHIN PRODUCTION AREA. ANY SOLIDS NOT REMOVED BY TRUCK ARE CAUGHT IN A DISCHARGE PIT AND LIQUID IS FILTERED TO STORAGE POND.

Describe how Chemicals and other contaminants are handled on-site:
NO CHEMICALS ARE HANDLED ON SITE.

7. Best Management Practice (BMPS)

Describe in detail all temporary, permanent and structural BMPS which will be used to control runoff of pollutants from facility's production area. Indicate the location of these measures. If BMPS are not installed include a schedule for implementation of each of these measures. Examples of BMP measures could include but are not limited to: constructing ditches, terraces,, and waterways above and open lot to divert clean water run on; installing gutters, downspouts and buried conduits to divert roof drainage; providing more roofed area: decreasing open lot surface area; repairing of adjusting water systems to minimize water wastage; using practical amounts of water for cooling purposes; recycling water if practical and applicable.

Production Area BMP's
CLEAN WATER DIVERSION-REFER TO # 5 FOR EXPLANATION.
ROOFGUTTERS AND DOWNSPOUTS ARE INSTALLED.
A ROOF COVER OVER THE HAY STORAGE BARN IN THE LOT AREA DIVERTING WTER FROM PRODUCTION AREA.

Describe in detail all temporary, permanent and structural Best Management Practices (BMPs) which will be used to control runoff of pollutants from facility's land production area. Indicate the location of these practices. If not already in use, include a schedule for implementation of each of these measures. Attached details and specifications may be used to supplement this description. Examples of BMP measures could include but are not limited to: maintaining setbacks from surface waters for manure applications; managing irrigation practices to prevent ponding of wastewater on land application sites;

never spray irrigating waste on to frozen ground: consulting with the Department prior to applying any liquid waste to frozen or snow-covered ground; applying wastes at agronomic rates.

Land Application BMP's

A 12 INCH BERM (1FOOT) HIGH SURROUNDS THE 11 ACRE
LIQUID RUN-OFF COULD BE APPLIED BY IRRIGATION BUT NOT IN WINTER.

Buffers	☐ Yes ☑ No	**Conservation Tillage**	☐ Yes ☑ No
Constructed Wetlands	☐ Yes ☑ No	**Grass Filter**	☐ Yes ☑ No
Infiltration Field	☐ Yes ☑ No	**Residue Management**	☐ Yes ☑ No
Set backs	☐ Yes ☑ No	**Terrace**	☑ Yes ☐ No

Other examples

8. Implementation, Operation, Maintenance and Record Keeping – Guidance

The permittee is required to develop guidance addressing implementation of NMP, proper operation and maintenance of the facility, and record keeping as described in Part 2 of the permit.

Has a guidance document been developed for the facility? ☑ Yes ☐ No

Certify the document address the following requirements:

Implementation of the NMP:	☑ Yes ☐ No
Facility operation and maintenance:	☑ Yes ☐ No
Record keeping and reporting	☑ Yes ☐ No
Sample collection and analysis:	☑ Yes ☐ No
Manure transfer	☑ Yes ☐ No

Provide name, date and location of most recent documentation:

NRCS DESIGN 2004
GLENDIVE, MT NMP WORKSHOP, JANUARY 2009
GLASGOW STOCKYARDS 2013

If your answer to any of the above question is no, provide explanation:

Section E – Land Application

Will manure be land applied to land either owned, rented, or leased by the owner or operator of the facility?

☐ Yes If yes, then the information requested in Section E must be provided.

☑ No If no, then provide an explanation of how animal waste at this facility are managed.

SOLID MANURE IS TRANSFERRED TO VALLEY COUNTY, MT LANDFILL.

Photos and/or Maps

Attach an aerial photograph or map of the site where manure is to be applied. (Use multiple photos/maps if necessary to show required details.) The photo(s)/map(s) must be printed on no larger than an 11"X 17" piece of paper, and must clearly identify the following items:

- Individual field boundaries for all planned land application areas
- A name, number, letter or other means of identifying each individual land application field
- The location of any downgradient surface waters.
- The location of any downgradient open tile line intake structures
- The location of any downgradient sinkholes
- The location of any downgradient agricultural well heads
- The location of all conduits to surface waters
- The specific manure/waste handling or nutrient management restrictions associated with each land application field
- The soil type(s) present and their locations within the individual land application field(s)
- The location of buffers and setbacks around state surface waters, well heads, etc.

Land Application Equipment Calibration

Describe the type of equipment used to land apply wastes and the calibration procedures:

LIQUID WASTE WILL BE PUMPED THROUGH GRATED PIPE, IF NEEDED.

Manure Sampling and Analysis Procedures

A representative manure sample will be analyzed a minimum of once annually for Total Nitrogen, and Total Phosphorus. Analysis results will be reported in lbs/ton or lbs/1,000 gal. Results of these analyses will be used in determining rates for manure, litter, and process wastewater.

Manure Sample collection will occur according to ARM 17.30.1334

Other (describe)

NRCS "SAMPLING MANURE FOR NUTRIENT MANGAEMENT"

Soil Sampling and Analysis Procedures

Representative soil (composite) samples from the top 6 inches layer of soil for each field where manure will be applied must be analyzed for phosphorus content at least once every three years. Analyses will be conducted by a qualified laboratory, using the Olsen P test. Results will be reported in parts per million (ppm) and will be used in determining application rates for manure, litter, and process wastewater

Soil samples collection will occur according the methods in ARM 17.30.1334

Other (describe)

NRCS "SAMPLING SOILS FOR NUTRIENT MANAGEMENT"

Phosphorus Risk Assessment

The permittee shall access the risk of phosphorus contamination of state waters. An assessment shall be conducted for each field, under the control of the operator, to which manure, litter or process wastewater will or

may be applied. If a new field is added in the future, then the permittee must submit a revised (modified) NMP. The permittee has the option of using Method A or Method B (below) to complete the assessment. Copies of all tables and calculations used to complete the assessments, as well as the results of the assessments, shall be submitted to the Department and copies shall be maintained on-site at the facility and available for Departmental review. The results of the assessments shall be used to determine the appropriate basis for land application of wastes from the facility.

Method Used

Indicate which method will be used to determine phosphorus application:

Method A – Representative Soil Sample
Method B – Phosphorus Index

Method A – Representative Soil Sample

a. Obtain one or more representative soil sample(s) from the field per 17.30.1334
b. Have the sample analyzed for Phosphorus by a qualified lab. The "Olsen P test" must be used for the analysis, and the result must be reported in parts per million (ppm)
c. Using the results of the Olsen P test, determine application basis according to the Table below.

Soil Test

Olsen P Soil Test Results (ppm)	Application Basis
<25.0	Nitrogen Needs of Crop
25.1 - 100.0	Phosphorus Needs of Crop
100.0 – 150.0	Phosphorus Needs up to Crop Removal Rate
>150.0	No Application allowed

Method B – Phosphorus Index

a. Complete a phosphorus Index according to the crop grown on each field. Complete table in Appendix A to calculate phosphorus index. For information on filling out specific sections in Appendix A, please refer to the method as described in Natural Resource Conservation Service (NRCS), Agronomy Technical Note MT-77 (rev3), January 2006.
b. Using the calculated Total Phosphorus Index Value, assign the overall site/field vulnerability to phosphorus loss according to the table below.

Total Phosphorus

Total Phosphorus Index Value	Site Vulnerability to Phosphorus Loss
<11	Low
11-21	(Medium)
22-43	High
>43	Very High

c. Using the calculated Site Vulnerability to Phosphorus Loss, determine the appropriate application basis according to the table below.

Site Vulnerability to Phosphorus Loss	Application Basis
Low	Nitrogen Needs
Medium	(Nitrogen Needs)
High	Phosphorus Need Up to Crop Removal
Very High	Phosphorus Crop Removal or No Application

The applicant has 2 ways in which to report how manure or process wastewater application rates can be reported to DEQ.

1. **Linear Approach**. Expresses rates of application as pounds of nitrogen and phosphorus. CAFOs selecting the linear approach to address rates of application must include in the NMP submitted to the permitting authority the following information for each crop, field, and year covered by the NMP, which will be used by the permitting authority to establish site-specific permit terms:
- The maximum application rate (pounds/acre/year of nitrogen and phosphorus) from manure, litter, and process wastewater.
- The outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field. [If a state does not have an N transport risk assessment, the NMP must document any basis for assuming that nitrogen will be fully used by crops.] The CAFO must specify any conservation practices used in calculating the risk rating.
- The crops to be planted or any other uses of a field such as pasture or fallow fields.
- The realistic annual yield goal for each crop or use identified for each field.
- The nitrogen and phosphorus recommendations from in ARM 17.30.1334 (technical standard) for each crop or use identified for each field.
- Credits for all residual nitrogen in each field that will be plant-available.
- Consideration of multi-year phosphorus application. For any field where nutrients are applied at a rate based on the crop phosphorus requirement, the NMP must account for single-year nutrient applications that supply more than the crop's annual phosphorus requirement.
- All other additions of plant available nitrogen and phosphorus (i.e., from sources other than manure, litter, or process wastewater or credits for residual nitrogen).
- The form and source of manure, litter, and process wastewater to be land-applied.
- The timing and method of land application. The NMP also must include storage capacities needed to ensure adequate storage that accommodates the timing indicated.
- The methodology that will be used to account for the amount of nitrogen and phosphorus in the manure, litter, and wastewater to be applied.
- Any other factors necessary to determine the maximum application rate identified in accordance with this Linear Approach.

2. **Narrative Rate Approach**. Expresses a narrative rate of application that results in the amount, in tons or gallons, of manure, litter, and process wastewater to be land applied. CAFOs selecting the narrative rate approach to address rates of application must include in the NMP submitted to the permitting authority the following information for each crop, field, and year covered by the NMP, which will be used by the permitting authority to establish site-specific permit terms:
- The maximum amounts of nitrogen and phosphorus that will be derived from all sources of nutrients (pounds/acre for each crop and field).
- The outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field. The CAFO must specify any conservation practices used in calculating the risk rating.
- The crops to be planted in each field or any other uses of a field such as pasture or fallow fields, including alternative crops if applicable. Any alternative crops included in the NMP must be listed by field, in addition to the crops identified in the planned crop rotation for that field.
- The realistic annual yield goal for each crop or use identified for each field for each year, including any alternative crops identified.
- The nitrogen and phosphorus recommendations from ***[the permitting authority to specify acceptable sources]*** for each crop or use identified for each field, including any alternative crops identified.
- The methodology (including formulas, sources of data, protocols for making determination, etc.) and actual data that will be used to account for: (1) the results of soil tests required by Parts II.A.4.b and III.A.3.g of this

permit, (2) credits for all nitrogen in the field that will be plant- available, (3) the amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied, (4) consideration of multi-year phosphorus application (for any field where nutrients are applied at a rate based on the crop phosphorus requirement, the methodology must account for single-year nutrient applications that supply more than the crop's annual phosphorus requirement), (5) all other additions of plant available nitrogen and phosphorus to the field (i.e., from sources other than manure, litter, or process wastewater or credits for residual nitrogen), (6) timing and method of land application, and (7) volatilization of nitrogen and mineralization of organic nitrogen.
- Any other factors necessary to determine the amounts of nitrogen and phosphorus to be applied in accordance with the Narrative Rate Approach.
- NMPs using the Narrative Rate Approach must also include the following projections, which will not be used by the permitting authority in establishing site-specific permit terms:

i. Planned crop rotations for each field for the period of permit coverage.
ii. Projected amount of manure, litter, or process wastewater to be applied.
iii. Projected credits for all nitrogen in the field that will be plant-available.
iv. Consideration of multi-year phosphorus application.
v. Accounting for other additions of plant-available nitrogen and phosphorus to the field.
vi. The predicted form, source, and method of application of manure, litter, and process wastewater for each crop

- If the receiving water is on the 303(d) list for nutrients then the narrative rate approach must be used.

a. For the Linear Approach the permittee will complete the Nutrient Budget Worksheet, below, for the next 5 years to which manure or process waste water is or may be applied. A copy of each Nutrient Budget Worksheet will be maintained on site, and a copy will be submitted to the Department.

Nutrient Budget Worksheet

Field identification: T11510 Year: 2013 Crop: PASTURE

Expected Crop Yield: N/A

Phosphorus index results or Phosphorus application from soil test: N/A

Method of Application: N/A

When will application occur: N/A

Nutrient Budget			Nitrogen-based Application	Phosphorus-based Application	Source of information
1		Crop Nutrient Needs, lbs/acre	50 LBS		
2	(-)	Credits from previous legume crops, lbs/ac	0		
3	(-)	Residuals from past manure production lbs/acre	0		
4	(-)	Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre	0		
5	(-)	Nutrients supplied in irrigation water, lbs/acre	0		
6		**= Additional Nutrients Needed, lbs/acre**	50 LBS		
7		Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test)	2 LBS/1000 GALS		
8	(x)	Nutrient Availability factor, for Phosphorus based application use 1.0	1.0		
9		**= Available Nutrients in Manure, lbs/ton or lbs/1000 gal**	2.0		
10		Additional Nutrients needed, lbs/acre (calculated above)	50 LBS		
11	(/)	Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above)	2.0		
12		**= Manure Application Rate, tons/acre or 1000 gal/acre**	25000 GAL/AC		

Comments:
THIS IS AN ESTIMATE, WATER SAMPLE WILL BE TAKEN PRIOR TO ANY LAND APPLICATION.

Section F - CERTIFICATION

Permittee Information: This form must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

All Permittees Must Complete the Following Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA]

A. Name (Type or Print)	
LINDA M NIELSEN	
B. Title (Type or Print)	**C. Phone No.**
OWNER	406-228-9306
D. Signature Linda M Nielsen	**E. Date Signed** 10-15-2013

The Department will not process this form until all of the requested information is supplied, and the appropriate fees are paid. Return this form and the applicable fee to:

Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, MT 59620-0901
(406) 444-3080

RECEIVED
OCT 24 2013
DEQ/WPB
PERMITTING & COMPLIANCE Div